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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,615	04/07/2005	Patrice Bujard	II/2-22760/A/PCT	7001
324 7590 03/10/2008				
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RONESL VICKY M				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
03/10/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,615

Applicant(s)

BUJARD ET AL.

Examiner

Vickey Ronesi

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-10 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 16-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date 9/28/06, 7/8/05.

DETAILED ACTION

Preliminary Amendment

1. The preliminary amendment filed on 1/17/2008 has been entered.

Claim Objections

2. Claims 1, 4-7, 9, 17, and 18 are objected to because of the following reasons:

With respect to claims 1, 4, 7, and 18, the "x" in SiO_x is not defined in the claim.

With respect to claims 5, the "z" for SiO_z is not defined in the claim. While claim 1 (on which claim 5 is dependent) defines z, this is only with respect to the alternative embodiment when the platelet-shaped particles are aluminum flakes coated with SiO_z .

With respect to claim 6, it is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, claim 5 (on which claim 6 is dependent) provides for two types of pigments, $\text{SiO}_2/\text{SiO}_x/\text{core}/\text{SiO}_x/\text{SiO}_z$ or $\text{D}^M/\text{SiO}_2/\text{SiO}_x/\text{core}/\text{SiO}_x/\text{SiO}_z/\text{D}^M$. Two of the compounds listed as the pigments in claim 6 do not fall within the scope of these two types, e.g., $\text{SiO}_x/\text{SiO}_2/\text{SiO}_x$, $\text{SiO}_x/\text{Al}/\text{SiO}_x$.

With respect to claim 7, it is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Specifically, the coating layer of claim 1 (on which claim 7 is dependent) is made optional in claim 7.

With respect to claim 9, the alternative is improper because there should only be one “and” to avoid confusion of intended combinations. Specifically, the “and” in line 4 after “graphite” should be deleted.

With respect to claim 17, the terms “especially” are objected to because they suggest a preferred embodiment but each embodiment is equally preferred.

With respect to claim 18, the “z” in SiO_z is mistakenly defined with “y”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 7, 10, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 5, 7, 18, the term “substantially” in the phrase “substantially consisting of” is a relative term which renders the claim indefinite. The term “substantially” is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Specifically, it is not made clear whether “substantially consisting of” suggests that the following ingredient is at least 50 % of the composition or if it should be read as “consisting essentially of”.

With respect to claim 10, the term “the ink-jet printing method” lacks antecedent basis.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-7, 10, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bujard et al (US 5,766,355) in view of Hermann et al (US 6,294,592).

Bujard et al discloses luster pigment (col. 4, lines 10-22) for use in printing inks (col. 10, line 9) having core of a transparent or metallic reflecting material such as aluminum (col. 3, lines 33-36), at least one coating of $\text{SiO}_{0.25-0.95}$, and a further coating of a dielectric material such as TiO_2 and SiO_2 (col. 4, lines 26-29). With respect to claim 7, note that while Bujard et al does not disclose a core consisting of SiO_x ($x = 0.3-0.95$), the core of claim 7 is open to a composite core which Bujard et al does teach. Specifically, it is the examiner's position that a transparent or metallic reflecting material coated with $\text{SiO}_{0.25-0.95}$ is a core as instantly claimed.

While Bujard et al teaches the use of its pigment in printing inks, it fails to disclose an aqueous ink composition comprising a binder and dispersant.

Hermann et al discloses an aqueous inkjet ink preparation (abstract) comprising a dispersing agent, a binder, and pigment, wherein the pigment includes effect pigments such as those coated with metal oxides (col. 3, lines 41-43) and the ink is applied by inkjet processes (col. 10, lines 44-56).

Given that Bujard et al discloses a pigment for use in printing inks and further given that inkjet ink compositions include a binder, dispersing agent, and pigment as taught by Hermann et

al, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize the pigment taught by Bujard et al in the inkjet ink composition taught by Hermann et al in order to obtain a an inkjet ink with luster effects and thereby apply the ink to a substrate with an inkjet process.

5. Claims 1, 3, 10, and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid et al (US 5,624,486) in view of Hermann et al (US 6,294,592).

Schmid et al discloses luster pigments for use in printing inks (col. 8, line 46) having an aluminum platelet substrate (col. 3, lines 33-37) having a size of 1-200 microns (col. , line 66) coated with a metal oxide such as silica (col. 4, lines -8; see example 2, col. 9).

While Schmid et al teaches the use of its pigment in printing inks, it fails to disclose an aqueous ink composition comprising a binder and dispersant.

Hermann et al discloses an aqueous inkjet ink preparation (abstract) comprising a dispersing agent, a binder, and pigment, wherein the pigment includes effect pigments such as those coated with metal oxides (col. 3, lines 41-43) and the ink is applied by inkjet processes (col. 10, lines 44-56).

Given that Schmid et al discloses a pigment for use in printing inks and further given that inkjet ink compositions include a binder, dispersing agent, and pigment as taught by Hermann et al, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize the pigment taught by Schmid et al in the inkjet ink composition taught by Hermann et al in order to obtain a an inkjet ink with luster effects and thereby apply the ink to a substrate with an inkjet process.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1 and 7-9 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. US 7,223,472 in view of Hermann et al (US 6,294,592). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons given below.

US ‘472 claims a composition comprising a polymer and a pigment having a particle size of 2 microns to 5 mm and a core of 50-97 atom % silicon and 3-95 wt % atom % oxygen per 100 % atom silicon ($\text{SiO}_{0.03-0.95}$) and optionally a layer of $\text{SiO}_{>0.95}$ and a dielectric layer like presently claimed.

US ‘472 fails to disclose an aqueous inkjet ink with a binder and dispersing agent, However, note col. 1, line 12 of US ‘472 which teaches that the composition can be a printing

ink. Case law holds that those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. *In re Vogel*, 422 F.2d 438, 164 USPQ 619,622 (CCPA 1970).

Hermann et al discloses an aqueous inkjet ink preparation (abstract) comprising a dispersing agent, a binder, and pigment--wherein the pigment includes effect pigments such as those coated with metal oxides (col. 3, lines 41-43).

Given that US '472 claims a composition comprising pigment like presently claimed which can be used in printing inks as taught by the specification and further given that inkjet ink compositions include a binder, dispersing agent, and pigment as taught by Hermann et al, it would have been obvious to one of ordinary skill in the art at the time of invention to utilize the composition claimed by US '472 as an inkjet ink composition which further includes a binder and dispersing agent.

7. Claims 1 and 7-9 are directed to an invention not patentably distinct from claims of commonly assigned U.S. Patent No. US 7,223,472 in view of Hermann et al (US 6,294,592). Specifically, see the discussion set forth in paragraph 6 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned U.S. Patent No. US 7,223,472, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly

owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

8. Claims 1 and 7-9 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. US 7,223,472 in view of Hermann et al (US 6,294,592). See the discussion set forth in paragraph 6 above.

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a

terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Conclusion

9. The “X” references cited on the International Search Report for PCT/EP03/11189 have not been used in the prior art rejections because of the following reasons:

- US 6,433,117 discloses inkjet compositions, however, it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

- EP 1 195 410 discloses a polyamide resin dispersion which is not taught to be used in inkjet inks and which it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

- US 2002/0035173 discloses dispersions useful for inkjet printing, however, it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

- EP 0 822 238 discloses an inkjet ink, however, it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

- US 5,707,433 discloses pigment ink compositions, however, it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

- US 5,310,778 discloses inkjet inks, however, it fails to disclose or suggest the use of a platelet-shaped particle having a core and shell structure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

3/5/2008

/Vickey Ronesi/
Examiner, Art Unit 1796